IIS Measurement & Improvement Validation

PRIORITY ORDER RECOMMENDATIONS

This graphic suggests a prioritized path, supported by both CDC and AIRA, toward aligning with IIS Measurement and Improvement (M&I). The links for each step below will bring up Validation reports that display IIS results. None of these steps should represent stopping points in the process – if your IIS program cannot make progress on one step, simply move on to the next. More detailed information specific to your IIS can be found by logging into the Aggregate Analysis Reporting Tool (AART) at app.immregistries.org/aart/home.

Questions can be directed to IISinfo@cdc.gov or info@immregistries.org.

1. Transport Basic
- ❑ Does your IIS offer the standard CDC WSDL as one possible transport method to exchange data?

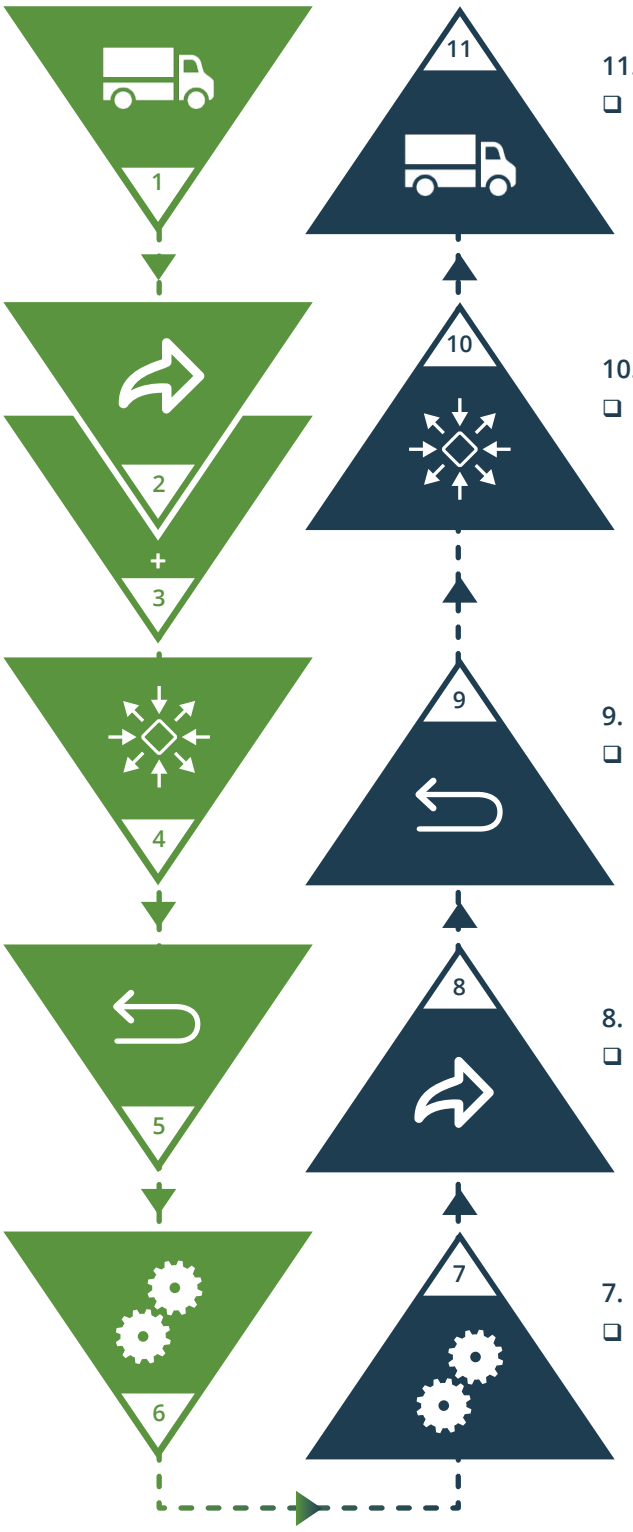
2. Submission Basic
- ❑ Does your IIS accept messages that are sent in standard HL7 format?

3. Submission Basic + Acks
- ❑ Does your IIS accept messages that are sent in a standard HL7 format, and does your IIS return conformant acknowledgment messages?

4. DQI Basic
- ❑ Does your IIS detect poor data quality for essential fields from data exchange partners?

5. Query Basic
- ❑ Does your IIS respond to queries in a standard way?

6. CDS Basic
- ❑ Do your IIS forecasts align with ACIP?



11. Transport Complete
- ❑ Does your IIS offer the standard CDC WSDL with all required security faults as one transport method?

10. DQI Complete
- ❑ Does your IIS detect poor data quality for all Incoming/Ongoing measures?

9. Query Complete
- ❑ Does your IIS respond to queries in a standard and timely way, including recognizing significant errors?

8. Submission Complete
- ❑ Does your IIS accept messages and acknowledgments in a standard format, including refusals, adverse events, etc.?

7. CDS Complete
- ❑ Do your IIS evaluations and forecasts align with ACIP?

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AMERICAN IMMUNIZATION REGISTRY ASSOCIATION

MEASUREMENT & IMPROVEMENT

IIS Measurement & Improvement Validation

PRIORITY ORDER RATIONALE

Step 1 – Transport Basic Validation

Offering Simple Object Access Protocol (SOAP)/ Web Services and the CDC Web Services Definition Language (WSDL) as one potential transport method for IIS data exchange with electronic health records (EHRs) standardizes and speeds up interoperability. This was the transport standard selected and supported by the IIS community from 2011 forward. In addition, AIRA uses this transport method to fully test and validate IIS functionality through the M&I process.

Step 2 – Submission Basic Validation

Accepting administered and historical doses in accordance with standards forms the basis of what IIS need to do to capture complete and accurate data for their population.

Step 3 – Submission Basic + Acknowledgments

While Submission Validation addresses what messages IIS need to accept to gather complete data, acknowledgment messages, or Acks, describe what the IIS needs to return to ensure their sending partners know the outcome of a submitted message. Although "Submission Basic + Acknowledgments" is not a Validation report in and of itself, it is an important interim step to highlight, as increasingly, acknowledgment messages provide the only visibility into how a message was processed.

Step 4 – DQI Basic

Basic Validation for Data Quality Incoming/Ongoing includes detecting poor data quality for essential patient demographic and vaccination event data elements in addition to the ability to map coding systems and accurately return immunization history information.

Step 5 – Query Basic Validation

Query and response are increasingly important areas for IIS who partner with entities that require real-time information on immunizations received and due at the point of care. Standardized responses ensure the information is usable at the point of care.

Step 6 – CDS Basic Validation

Clinical Decision Support (CDS) engines should align with the Advisory Committee on Immunization Practices (ACIP), along with the CDC CDS for immunizations specification recommendations. The basic level validates that the IIS forecast aligns with ACIP recommendations by executing Clinical Decision Support for Immunization (CDSi) test cases against the IIS.

Step 7 – CDS Complete Validation

The Complete Validation level for CDS validates that IIS forecast aligns with ACIP recommendations by executing CDSi test cases against the IIS that include both the recommendations as well as the evaluation (i.e., valid/invalid) status from the IIS.

Step 8 – Submission Complete Validation

This level of Validation includes the ability to receive conformant HL7 messages, to return conformant HL7 acknowledgment messages, as well as the ability to receive important, and often more complex data such as refusals, adverse events, contraindications, partial doses, etc.

Step 9 – Query Complete Validation

In addition to receiving comprehensive information at the point of care, providers interacting with an IIS that has achieved Validation for Query at the Complete level also receive responses in a standard and timely way, and the IIS is able to recognize and respond appropriately to a message with errors.

Step 10 – DQI Complete

The complete level of Validation for Data Quality Incoming/Ongoing includes detecting poor data quality for all patient demographic and vaccination event data elements in addition to the ability to map coding systems and return accurate immunization history information.

Step 11 – Transport Complete Validation

In addition to implementing SOAP Web Services and the CDC WSDL, an IIS achieving Validation for Transport at the Complete level, also recognizes and uses conformant security faults, further standardizing IIS-EHR interoperability.

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